AMENDMENTS TO THE CLAIMS

Listing of Claims

The following listing of claims replaces all prior versions and listings of claims in the application.

1. (Original): A measuring kit of microorganisms in a liquid sample characterized by comprising:

a first syringe for collecting a liquid sample;

a flocculant for flocculating protein in the liquid sample in the first syringe;

a first filter case, attachable to the first syringe, for housing a first filter that traps the flocculated protein and somatic cells and that transports free ATP (adenosine triphosphate) and microorganisms;

a second filter case, attachable to the first filter case, for housing a second filter that traps the microorganisms and that transports the free ATP;

a second syringe that can attach the second filter case to its leading end;

a washing liquid for washing the second filter;

a bacteriolytic agent for dissolving the microorganisms trapped on the second filter so as to dissolve out ATP;

a measuring tube for gathering the dissolved ATP together with the bacteriolytic agent; and

a luminous reagent for making the dissolved ATP glow.

2. (Original): A measuring kit of microorganisms in a liquid sample according to claim 1, characterized by further comprising a luminometer for measuring a luminous quantity and an adapter attached to the measuring tube so as to make a leading end of the measuring tube reach a luminosity measuring portion of the luminometer.

3. (Original): A measuring kit of microorganisms in a liquid sample according to claim 1 or claim 2, characterized by further comprising a filtering accelerating agent for making filtering perform in a short time or uses one mixing beforehand the filtering accelerating agent as the flocculant.

4. (Currently Amended): A measuring kit of microorganisms in a liquid sample according to ~~one of claim 1 to claim 3~~ claim 1 or 2, characterized in that the first filter and the second filter are assembled integrally in the first filter case and the second filter case and made disposable.

5. (Original): A measuring method of microorganisms in a liquid sample characterized by comprising:

a step for mixing a liquid sample with a flocculant that flocculates protein in the liquid sample;

a step for filtering under pressure or under reduced pressure by a first filter that traps the flocculated protein and somatic cells and that transports free ATP (adenosine triphosphate) and microorganisms;

a step for filtering under pressure or under reduced pressure a filtered liquid by a second

filter that has a pore diameter smaller than the first filter and that traps the microorganisms while transporting the free ATP so as to trap and condense the microorganisms in the liquid sample on a filtration film of the second filter;

and a step for adding a bacteriolytic agent in the microorganisms, adding a luminous reagent in an extracted liquid and measuring a luminous quantity generated.

6. (Original): A measuring method of microorganisms in a liquid sample according to claim 5, characterized by adding a step for adding a filtering accelerating agent for making filtering in a short time after the step for mixing the liquid sample with the flocculant that flocculates the protein in the liquid sample or simultaneously with the same step.

7. (Original): A measuring apparatus of microorganisms in a liquid sample characterized by mixing a liquid sample with a flocculant that flocculates protein in the liquid sample;

filtering under pressure or under reduced pressure by a first filter that traps the flocculated protein and somatic cells and that transports free ATP (adenosine triphosphate) and microorganisms;

filtering under pressure or under reduced pressure a filtered liquid by a second filter that has a pore diameter smaller than the first filter and that traps the microorganisms while transporting the free ATP so as to trap and condense the microorganisms in the liquid sample on a filtration film of the second filter; and

adding a bacteriolytic agent in the microorganisms, adding a luminous reagent in an extracted liquid, and measuring a luminous quantity generated.

8. (Original): A measuring method of microorganisms in a liquid sample according to claim 7, characterized by adding a filtering accelerating agent for making filtering in a short time after mixing the liquid sample with the flocculant that flocculates the protein in the liquid sample or simultaneously therewith.

9. (Currently Amended): A measuring kit of microorganisms in a liquid sample according to ~~one of claim 1 to claim 4 or a measuring method of microorganisms in a liquid sample according to claim 5 or claim 6 or a measuring apparatus of microorganisms in a liquid sample according to claim 7 or claim 8,~~ claim 1 or 2, characterized by using an aliphatic alcohol such as an ethanol, a carboxylic acid such as a benzoic acid or a salicylic acid, a chitosan or a chitosan oligosaccharide.

10. (Currently Amended): A measuring kit or a measuring method or a measuring apparatus of microorganisms in a liquid sample according to ~~one of claim 1 to claim 9~~ claim 1 or 2, characterized by using a filtering material of a pore diameter of about 1 μ m to about 10 μ m as the first filter.

11. (Currently Amended): A measuring kit or a measuring method or a measuring apparatus of microorganisms in a liquid sample according to ~~one of claim 1 to claim 10~~ claim 1 or 2, characterized in that the second filter is a porous polymer membrane having pores of a pore diameter of about 0.1 μ m to about 0.5 μ m.

12. (Original): A measuring kit or a measuring method or a measuring apparatus of microorganisms in a liquid sample according to claim 11, characterized in that the porous polymer membrane is made of one polymer among a polytetrafluoroehylene, a polyvinylidene difluoride, a polycarbonate, a cellulose acetate, a hydrophilic polypropylene, a nylon, a hydrophilic polyether sulfonate and hydrophilic borosilicate glass fibers.

13. (Currently Amended): A measuring kit or a measuring method or a measuring apparatus of microorganisms in a liquid sample according to ~~one of claim 1 to claim 12~~ claim 1 or 2, characterized in that the bacteriolytic agent is a sterile distilled water containing a dimethylsulfoxide.

14. (Original): A measuring kit or a measuring method or a measuring apparatus of microorganisms in a liquid sample according to claim 13, characterized in that the bacteriolytic agent is a sterile distilled water containing about 15% by content to about 20% by content of a dimethylsulfoxide.

15. (Currently Amended): A measuring kit or a measuring method or a measuring apparatus of microorganisms in a liquid sample according to ~~one of claim 3 to claim 14~~ claim 3, characterized by using an alkali metal salt of an ethylenediaminetetraacetic acid, an alkali metal salt of a trans-1, 2-cyclohexanediaminetetraacetic acid, an alkali metal salt of a glycol ether

diaminetetraacetic acid, an alkali metal salt of a diethylenetriamine pentaacetic acid, or an alkali metal salt of a nitrilotriacetic acid as the filtering accelerating agent.

16. (Currently Amended): A measuring kit or a measuring method or a measuring apparatus of microorganisms in a liquid sample according to ~~one of claim 5 to claim 15~~ claim 5, characterized by adding a sterile distilled water, in case of a solid sample or a sample of high viscosity, before mixing it with the flocculant and then homogenizes it into the liquid sample.

17. (New): a measuring method of microorganisms in a liquid sample according to claim 5 or claim 6, characterized by using an aliphatic alcohol such as an ethanol, a carboxylic acid such as a benzoic acid or a salicylic acid, a chitosan or a chitosan oligosaccharide.

18. (New): A measuring apparatus of microorganisms in a liquid sample according to claim 7 or claim 8, characterized by using an aliphatic alcohol such as an ethanol, a carboxylic acid such as a benzoic acid or a salicylic acid, a chitosan or a chitosan oligosaccharide.